

Title (en)
Adaptive power amplifier system and method

Title (de)
Adaptives Leistungsverstärkersystem und Verfahren

Title (fr)
Système amplificateur de puissance adaptatif et méthode

Publication
EP 1187314 B1 20050824 (EN)

Application
EP 01301948 A 20010305

Priority
US 64511700 A 20000824

Abstract (en)
[origin: EP1187314A1] A power amplifier system (40) uses adaptive distribution of signals through an amplifier architecture of parallel amplifier stages (26 a-d). For example, the power amplifier system can adjust the operation of individual amplifier stages in the amplifier arrangement, for example to reduce power handling capability of the amplifier stages based on information of the signal to be amplified by the amplifier arrangement, such as the power level. To take advantage of the adjusted operation of the amplifier stages, the power amplifier system uses a variable power divider (48) to reapportion the input signal power among the amplifier stages and at least one variable combiner (50) to adaptively combine amplified signals from the amplifier stages in changing proportions. As such, the power amplifier system is reconfigurable and/or can adapt to changing conditions to provide improved performance and/or efficiency. <IMAGE>

IPC 1-7
H03F 3/60

IPC 8 full level
H03F 3/68 (2006.01); **H03F 3/60** (2006.01)

CPC (source: EP US)
H03F 3/602 (2013.01 - EP US); **H03F 2200/198** (2013.01 - EP US)

Citation (examination)
• US 5017888 A 19910521 - MEINZER KARL [DE]
• LIMANN; PELKA: "Funktechnik ohne Ballast", vol. 386, part 387 1984, FRANCIS, M?NCHEN

Cited by
EP1756943A4; CN103999362A; EP3771093A4; US11962059B2; US9166537B2; WO2013055615A3; WO2006064466A3; WO2013011026A3; US7444124B1; US7863976B1; US8044716B1; WO2020046182A1

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 1187314 A1 20020313; EP 1187314 B1 20050824; DE 60112857 D1 20050929; DE 60112857 T2 20060608; JP 2002124841 A 20020426; US 6639463 B1 20031028

DOCDB simple family (application)
EP 01301948 A 20010305; DE 60112857 T 20010305; JP 2001253936 A 20010824; US 64511700 A 20000824